

IN THE CLAIMS

Please amend claims as follows:

Claim 1 (Currently Amended): A single mode optical fibre comprising:  
a light-conductive core portion (4),  
an internal cladding portion (3) surrounding this core portion (4), and  
a jacketing portion (1) surrounding this internal cladding portion (3), in which the refractive index of the core portion (4) is larger than those of the cladding portion and jacketing portion areas (3, 1) and in which the refractive indices of the cladding portion and jacketing portion areas (3, 1) are practically equal, ~~characterised in that~~  
wherein the internal cladding portion (3) is built up of ~~SiO<sub>2</sub>~~ SiO<sub>2</sub> comprising a fluorine doping within a range of 0.1 - 8.5 wt.%, thus resulting in the core portion (4) to be subjected to a compressive axial stress over its full cross section.

Claim 2 (Currently Amended): A single mode optical fibre according to claim 1, ~~characterised in that~~ wherein the amount of fluorine in the internal cladding portion (3) lies within the range of 0.2 - 2.0 wt.%.

Claim 3 (Currently Amended): A single mode optical fibre according to claim 1, ~~characterised in that there is~~ further comprising a buffer layer (2) between the jacketing portion (1) and the internal cladding portion (3), which buffer layer (2) has a refractive index that is lower than that of the core portion (4) and is practically equal to those of the internal cladding portion (3) and jacketing portion (1) areas.

Claim 4 (Currently Amended): A single mode optical fibre according to claim 1, ~~characterised in that there is~~ further comprising an intermediate layer (5) between the core portion (4) and the internal cladding portion (3), which intermediate layer (5) has a refractive index that is lower than that of the core portion (4) and is practically equal to those of the internal cladding portion (3) and jacketing portion (1) areas.

Claim 5 (Currently Amended): A single mode optical fibre according to claim 1, ~~characterised in that there is~~ further comprising an external cladding portion (7) on the outside of the jacketing portion (1), which external cladding portion (7) has a refractive index that is practically equal to those of the internal cladding portion (3) and jacketing portion (1) areas.

Claim 6 (Currently Amended): A single mode optical fibre according to claim 1, ~~characterised in that~~ wherein the internal cladding portion (3) has a thickness that lies within the range of 3 - 21  $\mu\text{m}$ .

Claim 7 (Currently Amended): A single mode optical fibre according to claim 1, ~~characterised in that~~ wherein the core portion (4) is built up of  $\text{SiO}_2$  SiO<sub>2</sub> comprising fluorine doping within a range of 0.2 - 2.0 wt. %.

Claim 8 (Currently Amended): A method for the manufacture of a single mode optical fibre, comprising a light-conductive core portion, an internal cladding portion surrounding this core portion and a jacketing portion surrounding this internal cladding portion, in which the refractive index of the core portion is larger than those of the internal cladding portion and jacketing portion areas, and in which the refractive indices of the

internal cladding portion and jacketing portion areas are practically equal, according to which method a silica substrate tube, functioning as jacketing portion, is being flushed with one or more reactive gases to form the internal cladding portion and the core portion, respectively, after which the substrate tube is collapsed and is drawn into a single mode optical fibre, characterised in that the internal cladding portion (3) is built up of ~~SiO<sub>2</sub>~~ SiO<sub>2</sub> comprising of fluorine ~~doping~~ doping within a range of 0.1 - 8.5 wt. %, thus resulting in the core portion (4) to be subjected to a compressive axial stress over its full cross section.

Claim 9 (Currently Amended): A method according to claim 8, ~~characterised in that~~ wherein the amount of fluorine in the internal cladding portion (3) lies within the range of 0.2 - 2.0 wt.%.

Claim 10 (Currently Amended): A method according to claim 8, ~~characterised in that~~ wherein a buffer layer (2) is inserted between the jacketing portion (1) and the internal cladding portion (3), which buffer layer (2) has a refractive index that is lower than that of the core portion (4) and is practically equal to those of the internal cladding portion (3) and jacketing portion (1) areas.

Claim 11 (Currently Amended): A method according to claim 8, ~~characterised in that~~ wherein an intermediate layer (5) is inserted between the core portion (4) and the internal cladding portion (3), which intermediate layer (5) has a refractive index that is lower than that of the core portion (4) and is practically equal to those of the internal cladding portion (3) and jacketing portion (1) areas.

Claim 12 (Currently Amended): A method according to claim 8, ~~characterised in that wherein~~ on the outside of the jacketing portion (1) an external cladding portion (7) is placed, which external cladding portion (7) has a refractive index that is practically equal to those of the internal cladding portion (3) and jacketing portion (1) areas.

Claim 13 (Currently Amended): A method according to claim 8, ~~characterised in that wherein~~ the formation of the core portion (4), and the internal cladding portion (3), and possibly of the external cladding portion (7), the intermediate layer (5) and/or buffer layer (2), is carried out by ~~means of~~ a PCVD procedure.

Claim 14 (Currently Amended): A method according to Claim 13, ~~characterised in that wherein~~ the PCVD procedure is carried out under plasma induction.

Claim 15 (New): A single mode optical fibre comprising:  
a light-conductive core portion,  
an internal cladding portion surrounding this core portion, and  
a jacketing portion surrounding this internal cladding portion, in which the refractive index of the core portion is larger than those of the cladding portion and jacketing portion areas and in which the refractive indices of the cladding portion and jacketing portion areas are practically equal,

wherein the internal cladding portion is built up of  $\text{SiO}_2$  comprising a fluorine doping within a range of 0.1 - 8.5 wt.%, thus resulting in the core portion to be subjected to a compressive axial stress over its full cross section, and characterised in that the attenuation loss of the fibre is at most 0.25 dB/km at 1550 nm.

Claim 16 (New): A single mode optical fibre according to claim 15, wherein the amount of fluorine in the internal cladding portion lies within the range of 0.2 - 2.0 wt.%;

Claim 17 (New): A single mode optical fibre according to claim 15, further comprising a buffer layer between the jacketing portion and the internal cladding portion, which buffer layer has a refractive index that is lower than that of the core portion and is practically equal to those of the internal cladding portion and jacketing portion areas.

Claim 18 (New): A single mode optical fibre according to claim 15, further comprising an intermediate layer between the core portion and the internal cladding portion, which intermediate layer has a refractive index that is lower than that of the core portion and is practically equal to those of the internal cladding portion and jacketing portion areas.

Claim 19 (New): A single mode optical fibre according to claim 15, further comprising an external cladding portion on the outside of the jacketing portion, which external cladding portion has a refractive index that is practically equal to those of the internal cladding portion and jacketing portion areas.

Claim 20 (New): A single mode optical fibre according to claim 15, wherein the internal cladding portion has a thickness that lies within the range of 3 - 21  $\mu\text{m}$ .

Claim 22 (New): A method for the manufacture of a single mode optical fibre, comprising a light-conductive core portion, an internal cladding portion surrounding this core portion and a jacketing portion surrounding this internal cladding portion, in which the refractive index of the core portion is larger than those of the internal cladding portion and jacketing portion areas, and in which the refractive indices of the internal cladding portion and jacketing portion areas are practically equal, according to which method a silica substrate tube, functioning as jacketing portion, is being flushed with one or more reactive gases to form the internal cladding portion and the core portion, respectively, after which the substrate tube is collapsed and is drawn into a single mode optical fibre, characterised in that the internal cladding portion is built up of  $\text{SiO}_2$  comprising of fluorine doping within a range of 0.1 - 8.5 wt. %, thus resulting in the core portion to be subjected to a compressive axial stress over its full cross section, and characterised in that the attenuation loss of the fibre is at most 0.25 dB/km at 1550 nm.

Claim 23 (New): A method according to claim 22, wherein the amount of fluorine in the internal cladding portion lies within the range of 0.2 - 2.0 wt.%.

Claim 24 (New): A method according to claim 22, wherein a buffer layer is inserted between the jacketing portion and the internal cladding portion, which buffer layer has a refractive index that is lower than that of the core portion and is practically equal to those of the internal cladding portion and jacketing portion areas.

Claim 25 (New): A method according to claim 22, wherein an intermediate layer is inserted between the core portion and the internal cladding portion, which intermediate layer

Claim 25 (New): A method according to claim 22, wherein an intermediate layer is inserted between the core portion and the internal cladding portion, which intermediate layer has a refractive index that is lower than that of the core portion and is practically equal to those of the internal cladding portion and jacketing portion areas.

Claim 26 (New): A method according to claim 22, wherein on the outside of the jacketing portion an external cladding portion is placed, which external cladding portion has a refractive index that is practically equal to those of the internal cladding portion and jacketing portion areas.

Claim 27 (New): A method according to claim 22, wherein the formation of the core portion, and the internal cladding portion, and possibly of the external cladding portion, the intermediate layer and/or buffer layer, is carried out by means of a PCVD procedure.

Claim 28 (New): A method according to Claim 27, wherein the PCVD procedure is carried out under plasma induction.